

Determination of Water Using Volumetric Karl Fischer Titration BY ASTM E203-08					Page 1 of 3
Facility Name: _____ VELAP ID _____					
Assessor Name: _____ Analyst Name: _____ Inspection Date _____					
Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
Records Examined: SOP Number/ Revision/ Date _____ Analyst: _____					
Sample ID: _____ Date of Sample Preparation: _____ Date of Analysis: _____					
Are reagent grade chemicals used unless they are first determined to be of sufficiently high enough purity as to not lessen the accuracy of the test?	7.1				
Was Type II or III water used?	7.2				
Was the Karl Fischer reagent (pyridine or pyridine free) purchased or prepared according to 7.3.3.1 or 7.3.3.2?	7.3.3.1-2				
<i>Procedure For Soluble Materials in Liquid or Solid:</i>					
Was the sample (25-50mL) titrated according the instrument manufacturer's instructions using the appropriate titer as determined by the amount of water anticipated in the sample?	10.1				
Was the water, weight% calculated according to 10.3?	10.3				
Was the KF reagent standardized daily (or as necessary) using the amounts of water, sodium tartrate dehydrate or water-in-methanol as shown in 11.1 ?	11.1				
Was 25-50 mL of methanol or appropriate solvent transferred to a clean, dry titration cell and pretitrated according to the manufacturer's instructions?	11.2				
Was the selected standard transferred to the pretitrated solvent?	11.3				
Was <ul style="list-style-type: none"> <li>a) a suitable amount of water weighed to the nearest 0.0001 g</li> <li>b) the weighed sodium tartrate dehydrate transferred using a dry spatula (then dipping the spatula into the alcohol</li> <li>c) or a hypodermic syringe used to transfer the standard water-in-methanol solution to the titration flask?</li> </ul>	11.3.1-3				
Notes/ Comments:					

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Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
Was the above solution titrated with the KF reagent using the instrument manufacturer's instructions and calculated according to 11.5?	10.4-5				
<i>Procedure for Insoluble Solids:</i>					
Was the sample weighed into a clean, dry titration cell with 25-50 mL of the selected solvent (Section 7) added then stoppered?	12.2				
Was the sample then extracted using a magnetic stirrer for at least 15 minutes and possible warming?	12.2				
Was the mixture titrated at room temperature with the KF reagent (Section 11.2) and the same volume of the solvent as a blank, then calculated per 12.3?	12.2-3				
Alternatively, was 50-100 mL of solvent added to the sample in a volumetric flask, stoppered, and extracted as before (12.2)?	12.4				
Was this solution then made up to the mark with solvent, mixed, and allowed to stand until clear?	12.4				
Was a suitable aliquot of the supernatant then transferred to a titration cell and titrated with KF reagent as described in 11.2?	12.4				
Was the same amount of solvent titrated as a blank?	12.4				
Was the water content of the sample calculated according to 12.5?	12.5				
Was the percentage of water reported to the nearest 0.001%?	13				
Notes/ Comments:					